the lock assembly **140** and its components so as not to be authorized, then one or more of the plungers **400**A-B are not properly biased, and, as such, the dispenser **10** will remain in its locked state, whereby the lock sections **452** of one or more of the keyed extension **420** remains within respective lock slots **560** of the lock arm **540**, thus preventing the engagement bar **160** from sliding upward to actuate the pump **596** when the actuator **50** is depressed.

Thus, an entity that provides the locking dispenser **10** to a business, hospital, or other institution is able to control which specific refill containers **60** are operable with the dispenser. As such, the inadvertent installation of a refill container **60** that contains inappropriate material for a given application is prevented, such as the inadvertent substitution of regular soap for antibacterial soap. Furthermore, the locking dispenser **10** prevents individuals intending to harm others by the installation of a tainted refill container **60** into the dispenser **10**, from being able to readily identify the physical characteristics of the markers **690** that form the key parameter needed to operate the dispenser **10**.

It will, therefore, be appreciated that one advantage of one or more embodiments of the present invention is that a locking dispenser provides a refill container with a key parameter and a lock assembly having a lock parameter, which enables the operation of the dispenser when the key parameter is authorized by the lock parameter. Another advantage of the present invention is that the locking dispenser prevents the use of incompatible refill containers without utilizing complex electronic components. Still another advantage of the present invention is that the locking dispenser utilizes components that are resistant to corrosion from moisture. Yet another advantage of the present invention is that the lock parameter can be readily modified, and the key parameter can be readily modified to enable the dispensers to be operable with only a select group of refill containers. An additional advantage of the present invention is that the lock parameter and the key parameter of the lock assembly and the refill container may be embodied by magnetic attraction and/or repulsion.

Although the present invention has been described in considerable detail with reference to certain embodiments, other embodiments are possible. Therefore, the spirit and scope of the appended claims should not be limited to the description of the embodiments contained herein.

What is claimed is:

1. A locking dispenser comprising:

a refill container carrying material therein to be dispensed by a pump coupled thereto, said refill container having a collar maintaining at least one marker configured in accordance with a predetermined key parameter;

a support bracket adapted to carry said refill container;

a lock assembly attached to said support bracket configured to be interfaced with said collar, said lock assembly maintaining at least one movable plunger configured in accordance with a predetermined lock parameter; and

an engagement bar operatively coupled to said support bracket that when actuated engages said pump to dispense said material from said refill container, said engagement bar maintaining a lock arm in operative communication with said at least one plunger, said plunger initially locking said lock arm to prevent the actuation of said engagement bar;

wherein said plunger unlocks said lock arm to enable the actuation of said engagement bar if said key parameter of said at least one marker is authorized by said lock parameter of said plunger when said marker and said plunger are interfaced, so as to enable the dispensing of said material from said refill container when said engagement bar is actuated.

2. The locking dispenser of claim **1**, wherein said at least one marker and said at least one plunger comprise magnets configured in accordance with said respective key parameter and said lock parameter.

3. The locking dispenser of claim **2**, wherein said magnets are enclosed in plastic.

4. The locking dispenser of claim **2**, wherein said lock parameter is defined at least partially by the orientation of said magnetic poles of said magnet maintained by said plunger.

5. The locking dispenser of claim **2**, wherein said key parameter is defined at least partially by the orientation of said magnetic poles of said magnet maintained by said marker.

6. The locking dispenser of claim **1**, wherein said lock parameter is defined at least partially by the arrangement of said plungers.

7. The locking dispenser of claim **1**, wherein said key parameter is defined at least partially by the arrangement of said markers.

8. The locking dispenser of claim **1**, wherein said lock arm maintains at least one locking aperture through which said at least one plunger extends.

9. The locking dispenser of claim **8**, wherein said at least one plunger comprises a head from which extends a keyed extension having a lock section and a notched section, wherein said keyed extension is received through said locking aperture.

10. The locking dispenser of claim **9**, wherein when said lock arm is locked, said lock section of said at least one plunger is received within said locking aperture of said lock arm.

11. The locking dispenser of claim **9**, wherein when said lock arm is unlocked, said notched section of said at least one plunger is received within said locking aperture of said lock arm.

12. The locking dispenser of claim **11**, wherein said locking aperture comprises a slide slot that extends at least partially to an edge of said lock arm, such that when said lock arm is unlocked, said plunger is received within said slide slot, allowing said engagement arm to freely slide about said slide slot.

13. The locking dispenser of claim **9**, wherein said plunger head is recessed to receive said at least one marker.

14. The locking dispenser of claim **9**, wherein said lock assembly maintains a lock slot that separates a lock plate from a lock grid that maintains said at least one plunger, wherein said lock slot receives said lock arm.

15. The locking dispenser of claim **14**, wherein said lock plate maintains at least one aperture to receive said keyed extension.

16. The locking dispenser of claim **1**, wherein said key parameter is defined by the arrangement of at least one magnetic north marker, at least one magnetic south marker, and at least one non-magnetic marker.

17. A method for operating a locking dispenser comprising:

providing a dispenser maintaining at least one movable plunger configured in accordance with a lock parameter, said plunger operatively engaging said dispenser to place said dispenser in a normally locked state;

providing a refill container carrying material to be dispensed having at least one marker configured in accordance with a key parameter;

installing said refill container at said dispenser, such that said marker is interfaced with said plunger;